

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/553,771	06/23/2006	Joern Borgert	PHDE030125US	7741	
595 MINER R		Y & STANDARDS		EXAMINER WHITTINGTON, KENNETH	
CLEVELAND	, OH 44143	•	ART UNIT PAPER NUMBER 2862		
			MAIL DATE	DELIVERY MODE	
			10/29/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

ŧ		Application No.	Applicant(s)			
			BORGERT ET AL.			
Office Action Summary		10/553,771				
	 ,	Examiner	Art Unit			
	The MAILING DATE of this communication app	Kenneth J. Whittington	2862			
Period fo	or Reply	ours on the cover sheet with the	re correspondence address			
VVHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING DOWNSHIP OF THE MAILING THE MAIL	ATE OF THIS COMMUNICAT 36(a). In no event, however, may a reply to will apply and will expire SIX (6) MONTHS accuse the application to become ABAND	TION. De timely filed from the mailing date of this communication. ONED (35 U.S.C. § 133).			
Status						
1)	Responsive to communication(s) filed on					
2a) <u></u>	This action is FINAL . 2b)⊠ This action is non-final.					
3)	- The state of the					
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11	, 453 O.G. 213.			
Disposit	ion of Claims					
5)□ 6)⊠ 7)□	Claim(s) 1-9 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1-9 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/o					
Applicat	ion Papers					
9)	The specification is objected to by the Examine	er.				
10)⊠	The drawing(s) filed on 19 October 2005 is/are		•			
	Applicant may not request that any objection to the					
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex		•			
Priority (under 35 U.S.C. § 119					
а)	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau See the attached detailed Office action for a list	s have been received. s have been received in Application in the contract of t	cation No eived in this National Stage			
Attachmen	et(s) te of References Cited (PTO-892)	4) 🔲 Interview Sumn	nary (PTO-413)			
2) Notice Notice 3) Infor	the of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date 10/19/05.	Paper No(s)/Ma				

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DETAILED ACTION

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Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (1) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Weed et al. (US4317078), hereinafter Weed.

Regarding claim 1, Weed discloses a tracking method for tracking a sensor in a capture range in a field generated by a field generator, the method comprising the steps of:

- (a) generating a field by means of the field generator for defining the capture range (See FIGS. 1-13, item 12);
- (b) identifying a region of interest including the sensor within the capture range (See FIGS. 1-13, sensor item 14, see col. 8, lines 48-68, note x-axis is identified);
- (c) narrowing the capture range by narrowing the field by means of the field generator (Note definition of narrow as defined by Applicant at paragraph 0006 of the present application that includes adjustment of a direction of the magnetic field. See col. 8, lines 48-68, generator moved along x-axis with sensor stationary, thus direction of magnetic field

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with respect to sensor is adjusted and thus narrowed as contemplated by Applicant);

(d) iteratively repeating steps (a) to (c) (See col. 8, lines 48-68, note generator 14 is repeatedly moved to positions along the x-axis until sufficient to determine x_0).

Regarding claim 2, Weed discloses the field generator is a magnetic field generator and emits a magnetic field, wherein the magnetic field generator comprises at least one coil, further comprising the step of: adjusting a position of the at least one coil in the field generator for narrowing the capture range such that at least one of a size and shape of the capture range is reduced (See FIGS. 1-13, item 12 and see col. 8, lines 48-68, note position of generator is adjusted. Note also that since Weed discloses the movement of one coil as recited in this claim, it discloses the properties recited and contemplated in view of this movement in this claim).

Regarding claim 3, Weed discloses the step of displacing the field generator for narrowing the capture range (Note again definition of narrow as defined by Applicant at paragraph 0006 of the present application that includes adjustment of a direction of the magnetic field. See col. 8, lines 48-68, generator moved along x-axis with sensor stationary, thus

direction of magnetic field with respect to sensor is adjusted and thus narrowed as contemplated in this claim).

Regarding claim 4, Weed discloses the field generator is a magnetic field generator and emits a magnetic field, wherein the magnetic field generator comprises at least one coil, further comprising the step of: adjusting an orientation of the at least one coil in the field generator for narrowing the capture range such that a location of the capture range is adjusted (See FIGS. 1-13, item 12 and see col. 8, lines 48-68, note movement of coil 12 changes the orientation of the coil 12 with respect to sensor 14, thus location is adjusted. See also col. 9, lines 1-25, note coil 12 is rotated and moved along y-axis).

Regarding claim 5, Weed discloses a tracking system for tracking a sensor in a capture range in a field generated by a field generator, wherein the field generator is adapted to adjust at least one of a size, direction and orientation of the capture range (See col. 8, line 48 to col. 9, line 25, note coil 12 is moved along the x and y axis and rotate 90 degrees, each and/or all of which adjusts the magnetic field).

Regarding claim 6, Weed discloses the field generator is a magnetic field generator and emits a magnetic field; wherein the magnetic field generator comprises at least one coil; and wherein a position of the at least one coil in the field

generator is adjustable for narrowing the capture range such that at least one of a size and shape of the capture range is reduced (See FIGS. 1-13, item 12 and see col. 8, lines 48-68, note position of generator is adjusted. Note also that since Weed discloses the movement of one coil as recited in this claim, it discloses the properties recited and contemplated in view of this movement in this claim).

Regarding claim 7, Weed discloses the field generator is movable for narrowing the capture range (Note again definition of narrow as defined by Applicant at paragraph 0006 of the present application that includes adjustment of a direction of the magnetic field. See col. 8, lines 48-68, generator moved along x-axis with sensor stationary, thus direction of magnetic field with respect to sensor is adjusted and thus narrowed as contemplated in this claim).

Regarding claim 8, Weed discloses the field generator is a magnetic field generator and emits a magnetic field; wherein the magnetic field generator comprises at least one coil; and wherein an orientation of the at least one coil in the field generator is adjustable for narrowing the capture range such that a location of the capture range is adjusted (See FIGS. 1-13, item 12 and see col. 8, lines 48-68, note movement of coil 12 changes the orientation of the coil 12 with respect to sensor

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14, thus location is adjusted. See also col. 9, lines 1-25, note coil 12 is rotated and moved along y-axis).

Claims 1, 5 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Acker (US5729129). Regarding claim 1, Acker discloses a tracking method for tracking a sensor in a capture range in a field generated by a field generator, the method comprising the steps of:

- (a) generating a field by means of the field generator for defining the capture range (See Acker FIGS. 1-4, items 10, 10a, 10b, 10c);
- (b) identifying a region of interest including the sensor within the capture range (See FIG. 1, item 50);
- (c) narrowing the capture range by narrowing the field by means of the field generator (See FIG. 4 and col. 7, line 21 to col. 8, line 39, note the field strength of the coils 10, 10a, 10b and 10c is adjusted and hence their size or range is adjusted depending on the position of sensor and its output signal);
- (d) iteratively repeating steps (a) to (c). (See FIG. 4, col. 7, line 21 to col. 8, line 39, note process is repeated as the sensor moves within the system).

Regarding claim 5, Acker discloses a tracking system for tracking a sensor in a capture range in a field generated by a field generator, wherein the field generator is adapted to adjust at least one of a size, direction and orientation of the capture range (See FIG. 4 and col. 7, line 21 to col. 8, line 39, note the field strength of the coils 10, 10a, 10b and 10c is adjusted and hence their size or range is adjusted depending on the position of sensor and its output signal).

Regarding claim 9, Acker discloses a computer program product comprising computer program code means to perform the following steps when the computer program is executed on a computerized tracking system (See col. 6, lines 19-49):

- (a) generating a field by means of the field generator for defining the capture range (See Acker FIGS. 1-4, items 10, 10a, 10b, 10c);
- (b) identifying a region of interest including the sensor within the capture range (See FIG. 1, item 50);
- (c) narrowing the capture range by narrowing the field by means of the field generator to the region of interest (See FIG. 4 and col. 7, line 21 to col. 8, line 39, note the field strength of the coils 10, 10a, 10b and 10c is adjusted and hence their size or range is adjusted depending on the position of sensor and its output signal);

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(d) iteratively repeating steps (a) to (c) (See FIG. 4,
col. 7, line 21 to col. 8, line 39, note process is repeated as
the sensor moves within the system).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth J. Whittington whose telephone number is (571) 272-2264. The examiner can normally be reached on Monday-Friday, 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on (571) 272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Kenneth J Whittington

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Examiner

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